

**Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz Part 4-6: Low voltage decoupling filters - Phase coupler**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50065-4-6:2004 sisaldab Euroopa standardi EN 50065-4-6:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50065-4-6:2004 consists of the English text of the European standard EN 50065-4-6:2004.</p> <p>This document is endorsed on 16.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This European Standard applies to phase couplers in a mains communication system for phase to neutral voltage not exceeding 250 V a.c. and a nominal current not exceeding 125 A, intended for household and similar fixed installation including residential, commercial and light industrial buildings.</p>	<p><b>Scope:</b> This European Standard applies to phase couplers in a mains communication system for phase to neutral voltage not exceeding 250 V a.c. and a nominal current not exceeding 125 A, intended for household and similar fixed installation including residential, commercial and light industrial buildings.</p>
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**Võtmesõnad:**

English version

**Signalling on low-voltage electrical installations  
in the frequency range 3 kHz to 148,5 kHz  
Part 4-6: Low voltage decoupling filters –  
Phase coupler**

Transmission de signaux sur les réseaux  
électriques basse tension dans la bande  
de fréquences de 3 kHz à 148,5 kHz  
Partie 4-6: Filtres basse tension  
de découplage –  
Coupleur de phase

Signalübertragung auf elektrischen  
Niederspannungsnetzen  
im Frequenzbereich 3 kHz bis 148,5 kHz  
Teil 4-6: Niederspannungs-  
Entkopplungsfilter –  
Phasenkoppler

This European Standard was approved by CENELEC on 2004-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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## CENELEC

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

This European Standard was prepared by SC 205A, Mains communicating systems, of Technical Committee CENELEC TC 205, Home and Building Electronic Systems (HBES).

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50065-4-6 on 2004-03-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2005-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-03-01

EN 50065 consists of several parts, under the general title: Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz

Part 1	General requirements, frequency bands and electromagnetic disturbances
Part 2-1	Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148,5 kHz and intended for use in residential, commercial and light industrial environments
Part 2-2	Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148,5 kHz and intended for use in industrial environments
Part 2-3	Immunity requirements for mains communications equipment and systems operating in the range of frequencies 3 kHz to 95 kHz and intended for use by electricity suppliers and distributors
Part 4-1	Low voltage decoupling filters – Generic specification
Part 4-2 *)	Low voltage decoupling filters – Safety requirements
Part 4-3	Low voltage decoupling filters – Incoming filter
Part 4-4	Low voltage decoupling filters – Impedance filter
Part 4-5	Low voltage decoupling filters – Segmentation filter
Part 4-6	Low voltage decoupling filters – Phase coupler
Part 4-7 *)	Portable low voltage decoupling filters - Safety requirements
Part 7	Equipment impedance

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\*) This part covers the extended frequency ranges 3 kHz to 148,5 kHz and 1,6 MHz to 30 MHz.

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## 1 Scope

This European Standard applies to phase couplers in a mains communication system for phase to neutral voltage not exceeding 250 V a.c. and a nominal current not exceeding 125 A, intended for household and similar fixed installation including residential, commercial and light industrial buildings.

This European Standard applies to phase couplers used to control the coupling of communication signals between phases or sections of a mains communication system.

A “phase coupler” may be used to achieve coupling between the phases of a multiphase installation, or to provide bridging of signals around other system components.

The standard defines

- the requirements to ensure a minimum coupling between the sections, and
- the requirements to ensure no change on the safety of the electrical installation.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50065-2-1	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 2-1: Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148,5 kHz and intended for use in residential, commercial and light industrial environments
EN 50065-2-2	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 2-2: Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148,5 kHz and intended for use in industrial environments
EN 50065-2-3	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 2-3: Immunity requirements for mains communications equipment and systems operating in the range of frequencies 3 kHz to 95 kHz and intended for use by electricity suppliers and distributors
EN 50065-4-1	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 4-1: Low voltage decoupling filters – Generic specification
EN 50065-4-2	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz – Part 4-2: Low voltage decoupling filters – Safety requirements